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EXAMINER

YANG, LINA

ART UNIT PAPER NUMBER

2665

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/027,005

Applicant(s)

CLEMM ET AL

Examiner

Lina Yang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/30/2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application ~~from the International Bureau~~ (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to applicant's communication filed 9/30/2005. The Applicant's remarks and amendments to the claims were considered with the results that follow.

2. Claims 1-13 have been presented for examination in this application. In response to the last Office Action, claims 1 and 9 have been amended. No claims have been canceled. No claims have been added. As a result, claims 1-13 are now pending in this application.

Response to Arguments

3. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty

defined in section 351 (a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2 and 6-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Elliott et al. (US Patent No. 6,614,781 B1).

Regarding claims 1, 10 and 11 (differ by statutory classes), Elliott teaches a method of managing packet voice networks, the method comprising the computer-implemented steps of (col. 58 lines 63-67 and col. 59 lines 3-5):

creating and storing a virtual switch, in a packet-switched voice network (system in fig. 4A) having a media gateway controller (fig. 1, "soft switch" in fig. 4A) and one or more associated media gateways (fig. 1, "gateways" in fig. 4A) ;

receiving user input that specifies a configuration operation on the virtual switch and one or more parameter values (figs. 4F-4I and correspondence descriptions; through "configuration server"); and

automatically issuing one or more configuration instructions to both the media gateway controller and the media gateway, resulting in configuring both the media gateway controller and the media gateway as specified in the user input (figs. 4F-4I and correspondence descriptions; through "configuration server").

Regarding claim 2, Elliott further teaches that the virtual switch object is created as part of a network management application computer program (Network management component 118 in fig. 1; col. 20 lines 30-36) wherein the network management application is communicatively coupled to an operational support system ("configuration server" in fig. 2A-1); and to one or more element management systems ("soft switch"

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system in fig. 1); and further comprising the steps of issuing one or more configuration requests to one or more of the element management systems as part of the step of automatically issuing configuration instructions (figs. 4F-4I; through "configuration server").

Regarding claim 6, Elliott further teaches that the configuration operation of the step of receiving user input is selected from among the set consisting of: associate/disassociate a media gateway from a virtual switch, add or remove or modify parameters of a primary rate interface (PRI) backhaul service; add or remove or modify a trunk, a trunk group, routes, or route lists; add or remove or modify a customer; or turn up or tear down or modify service for a customer (col. 19 lines 4-8 and fig. 4A in Elliott).

Regarding claim 7, Elliott further teaches that the virtual switch object comprises programmatic objects representing a media gateway controller ("soft switch" in fig. 1 and fig. 4A) and a media gateway ("gateway" in fig. 1 and "gateways" in fig. 4A), and associations between the media gateway and media gateway controller ("402", "414", "412" in fig. 4A).

Regarding claim 8, Elliott further teaches that the virtual switch object comprises programmatic objects representing a media gateway controller ("soft switch" in fig. 1 and fig. 4A), a media gateway ("gateway" in fig. 1 and "gateways" in fig. 4A), associations between the media gateway and media gateway controller ("402", "414",

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"412" in fig. 4A); ~~one or more connection-termination points of the media gateway~~ controller and the media gateway (inherently they are termination points at the ends of "402" between "Soft Switch" and "SS7 Gateway" in fig. 4A), one or more virtual trunks ("412" in fig. 4A); and one or more physical resources (for example physical connection media "414" in fig. 4A).

Regarding claim 9, Elliott further teaches that the user input comprises user input selecting a virtual switch and user input selecting an "Add PRI Signaling Backhaul" function (fig. 1; "Gateway Sites"; col. 19 lines 25-67 and col. 20 lines 1-4) and wherein the configuration instructions instruct the media gateway and media gateway controller, as specified, to add a line with Time Division Multiplexed (TDM) endpoints and a Common Channel Signaling (CCS) channel on the selected media gateway (fig. 1; "Signaling Network"; col. 20 lines 6-13); add a new trunk group at the media gateway controller and associate it with a customer (fig. 1; "Gateway Sites"; col. 19 lines 25-67 and col. 20 lines 1-4); add one or more trunks at the media gateway controller (fig. 1; "Soft Switch Sites"; col. 18 lines 32-50) ; associate the trunks with a corresponding endpoint of the media gateway, verify that a signaling backhaul connection has been set up; set up a signaling backhaul connection if required; set up a cross-connect between the CCS channel and the signaling backhaul connection at the media gateway, if required, as determined by the type of media gateway (fig. 1; the combination of "Soft Switch Sites"; "Gateway Sites" and "Signaling Network").

Regarding claim 12, Elliott teaches an apparatus for managing packet voice ... networks using a virtual switch approach, comprising:

a network interface that is coupled to the data network for receiving one or more packet flows therefrom (inherently for the designed function of the computer as stated in col. 31 lines 54-48; fig. 4B-4E; the soft switch is an object oriented programming model):

a processor (fig. 70 B col. 58 lines 45-47);

one or more stored sequences of instructions which, when executed by the processor, cause the processor to carry out the steps of (col. 58 lines 63-67 and col. 59 lines 3-5):

creating and storing a virtual switch (system in fig. 4A) having a media gateway controller (fig. 1, "soft switch" in fig. 4A) and one or more associated media gateways (fig. 1, "gateways" in fig. 4A);

receiving user input that specifies a configuration operation on the virtual switch and one or more parameter values (figs. 4F-4I and correspondence descriptions; through "configuration server"); and

automatically issuing one or more configuration instructions to both the media gateway controller and the media gateway, resulting in configuring both the media gateway controller and the media gateway as specified in the user input (figs. 4F-4I and correspondence descriptions; through "configuration server").

Regarding claim 13, Elliott further teaches that the virtual switch object is created as part of a network management application computer program ("Network

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management component 118" in fig. 1 and col. 20 lines 30-36) that is interfaced to an operational support system ("configuration server" in fig. 2A-1), and wherein the step of receiving user input comprises receiving user input from an interface to the operational support system that specifies a configuration operation on the virtual switch and one or more parameter values (figs. 4F-4I and the correspondence descriptions; through "configuration server").

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Elliott et al. (US Patent No. 6,614,781 B1) in view of Zirojevic et al. (U. S. Patent Application No. 20030035417 A1), and further in view of Miyazawa et al. (U. S. Patent Application No. 20010003189 A1).

Regarding claim 3, Elliott further teaches that the virtual switch object is created as part of a network management application computer program (Network management component 118 in fig. 1; col. 20 lines 30-36).

Elliott differs from the claimed invention in that Elliott does not specifically teach that the network management application computer program that generates a graphical user interface that displays an icon representation of the virtual switch. However, it's well known in the art that most current computer programs provide graphical user interface that displays icons. For example, Zirojevic teaches computer-based test systems that graphically defining a route through one or more switch devices, wherein the one or more switch devices are used to connect test instruments to test points on a unit under test ([0002] and fig. 17). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to include a graphical user interface that displays an icon representation of the virtual switch, as taught by Zirojevic in the assembly of Elliott in order to provide better and convenient user interface.

The combined assembly of Elliott and Zirojevic differs from the claimed invention in that the combined assembly does not specifically teach that the step of receiving user input comprises the step of receiving user input dragging the icon representation and dropping the icon representation in a data entry hold. However, it's well known in the art that most current computers provide user interfaces of "dragging and dropping". For example, Miyazawa teaches that most user interfaces of current computers are graphical and are operated by dragging and dropping icons, and have superb

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operability ([0005]). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to include that the step of receiving user input comprises the step of receiving user input dragging the icon representation and dropping the icon representation in a data entry hold, as taught by Miyazawa in the combined assembly of Elliott and Zirojevic in order to provide more friendly user interface.

Regarding claim 4, the combined assembly of Elliott, Zirojevic and Miyazawa further teaches that displaying the icon representation in an object holding area of the graphical user interface when the media gateway associated with the object is not then currently associated with a media gateway controller (fig. 19 in Zirojevic).

Regarding claim 5, the combined assembly of Elliott, Zirojevic and Miyazawa further teaches that the graphical user interface comprises a tree view of the virtual switch and each media gateway or media gateway controller associated therewith, a topology map of a network topology that includes the virtual switch, and an object holding area that displays un-associated network elements (fig. 17 in Zirojevic).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Berg et. al. (US Patent No. 6,680,952 B1) teaches a system with a media gateway controller and gateways that provides a generic backhaul protocol for passing telecommunication signaling messages according to multiple signaling protocols between a gateway and a media gateway controller.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lina Yang whose telephone number is (571)272-3151. The examiner can normally be reached Monday through Wednesday between 7:00 a.m. and 7:30 p.m. eastern standard time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 517-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LY



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PRIMARY EXAMINER